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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,181	08/30/2006	Hirofumi Nozawa	293599US3PCT	7758

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

IRVIN, THOMAS W

ART UNIT	PAPER NUMBER
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3657

NOTIFICATION DATE	DELIVERY MODE
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10/16/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/591,181	Applicant(s) NOZAWA ET AL.	
	Examiner THOMAS W. IRVIN	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-30 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 16, 17, 24-30, 32-34 and 36 is/are rejected.
- 7) ☒ Claim(s) 15, 18-23 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The finality of the office action mailed 11 June 2009 has been withdrawn and Applicant's remarks filed 11 September 2009 have been entered. A new grounds of rejection is set forth below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 16, 17, 24-30, 32-34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (5,628,700).

In Re claims 14 and 25, Yamada disclose a CVT comprising: a driven pulley shaft (62) supported by first and second bearings (either side of gear 72) [see fig. 1]. Yamada et al further disclose a driving pulley (50) on a pulley shaft (24), the pulley shaft comprising an oil supply passage (see fig. 2) that includes a radial oil passage (24h₁, 24h₂); a movable sheave (55); and a cylindrical member (54b₁) attached to the shaft, an outer surface of an inner cylindrical portion of the movable sheave contacts and slides on an inner peripheral surface of the cylinder member. Yamada et al. fail to teach the arrangement of the pulley on the driven shaft as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have duplicated the

Art Unit: 3657

driving pulley arrangement on the driven shaft as a matter of engineering design choice to reduce manufacturing costs and to provide a less complicated assembly and speed-change control. The examiner notes that, in this modified arrangement, the radial oil passage would be formed outside of a portion of the shaft between the two bearings located on either side of the gear (72) [as shown in fig. 1], and there would be no radially extending oil passages between the bearings.

In Re claims 16 and 17, see spline portion (24a) and oil passage (24h₁).

In Re claim 24, the apparatus of Yamada et al., as modified, appears to operate in this manner.

In Re claim 26, it appears that a load applied to the movable sheave can be transmitted to the cylinder member.

In Re claim 27, see bearings located on either side of gear (72) shown in fig. 1.

In Re claim 28-30, see spline portion (24a) and radial oil passages (24h₁, 24h₂).

In Re claims 32-34, see oil passages (56a,56b) and spline portion (24a).

In Re claim 36, see figs. 1 and 2.

Allowable Subject Matter

Claims 15, 18-23, 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, the limitation defining the location of the bearings on either side of the sheaves is deemed allowable.

Response to Arguments

Applicant's arguments, see Remarks, filed 11 September 2009, with respect to the rejection(s) of claim(s) 14, 16, 17, 24-30, 32-34, and 36 under 35 U.S.C. 102(b) to Yamada et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yamada et al.

Additionally, the examiner understands that fig. 6 of Yamada et al. shows a follower pulley not having the bearing arrangement claimed. However, the examiner points out that the rejection is based upon the "first preferred embodiment" shown in fig. 1. This embodiment shows three bearings supporting the pulley shaft (62) with two of the bearings located on either side of drive gear (72) and on the same side of the driven pulley (60).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS W. IRVIN whose telephone number is (571)270-3095. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3657

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas W. Irvin/
Examiner, Art Unit 3657

/Robert A. Siconolfi/
Supervisory Patent Examiner, Art
Unit 3657